IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1-3. (Canceled).

4. (Amended) A method of determining motion compensation for an input image, said method comprising the steps of:

(a) providing a first motion vector MV1 between the input image and a reference image part r1 of one reference image R1 having a plurality of reference image parts;

(b) calculating a second motion vector MV2 between the input image and a reference image part r2 of another reference image R2 having a plurality of reference image parts from said first motion vector MV1;

(c) calculating pixel values of said reference image parts r1 and r2 from peripheral pixels at positions corresponding to said first and second motion vectors MV1 and MV2, wherein said reference images R1 and R2 are such that a motion vector MV3 between said reference image parts r1 and r2 has a mathematical relationship with said first and second motion vectors MV1 and MV2 in which said motion vector MV3 is parallel to and different in value from each of said first and second motion vectors MV1 and MV2; and

(d) calculating said motion compensation for said input image from said pixel values calculated in step (c).

5. A method for determining a motion-compensated image, said method comprising the steps of:

(a) providing a first motion vector MV1 between the motion-compensated image and a reference image part r1 of one reference image R1 having a plurality of parts;

(b) calculating a second motion vector MV2 between the motion-compensated image and a reference image part r2 of another reference image R2 having a plurality of reference image parts from said first motion vector MV1;

(c) calculating pixel values of said reference image parts r1 and r2 from peripheral pixels at positions corresponding to said first and second motion vectors MV1 and MV2, wherein said reference images R1 and R2 are such that a motion vector MV3 between said reference image parts r1 and r2 has a mathematical relationship with said first and second motion vectors MV1 and MV2 in which said motion vector MV3 is parallel to and different in value from each of said first and second motion vectors MV1 and MV2; and

(d) calculating motion-compensated pixel values from said pixel values calculated in step (c) to determine said motion-

compensated image.

6. An apparatus for determining motion compensation for an input image, said apparatus comprising:

(a) means for providing a first motion vector MV1 between the input image and a reference image part r1 of one reference image R1 having a plurality of reference image parts;

(b) means for calculating a second motion vector MV2 between the input image and a reference image part r2 of another reference image R2 having a plurality of reference image parts from said first motion vector MV1;

(c) means for calculating pixel values of said reference image parts r1 and r2 from peripheral pixels at positions corresponding to said first and second motion vectors MV1 and MV2, wherein said reference images R1 and R2 are such that a motion vector MV3 between said reference image parts r1 and r2 has a mathematical relationship with said first and second motion vectors MV1 and MV2 in which said motion vector MV3 is parallel to and different in value from each of said first and second motion vectors MV1 and MV2; and

(d) means for calculating motion-compensated pixel values of said input image from said pixel values of said reference image parts r1 and r2 to determine said motion compensation.

7. An apparatus in accordance with claim 6, wherein said reference images R1 and R2 are previous to said input image in a time sequence.

8. An apparatus for determining a motion-compensated image from a reference image having a plurality of parts and a motion vector of the reference image, said apparatus comprising:

(a) means for providing a first motion vector MV1 between said motion-compensated image and a reference image part r1 of one reference image R1 having a plurality of reference image parts;

(b) means for calculating a second motion vector MV2 between said motion-compensated image and a reference image part r2 of another reference image R2 having a plurality of reference image parts from said first motion vector MV2;

(c) means for calculating pixel values of said reference image parts r1 and r2 from peripheral pixels at positions corresponding to said first and second motion vectors MV1 and MV2, wherein said reference images R1 and R2 are such that a motion vector MV3 between said reference image parts r1 and r2 has a mathematical relationship with said first and second motion vectors MV1 and MV2 in which said motion vector MV3 is parallel to and different in value from each of said first and second

motion vectors MV1 and MV2; and

(d) means for calculating motion-compensated pixel values from said pixel values of said reference image parts r1 and r2 to determine said motion-compensated image.

9. An apparatus in accordance with claim 8, wherein said reference images R1 and R2 are previous to said motion-compensated image in a time sequence.

10. A method in accordance with claim 4, wherein said parts R1 and R2 are previous to said input image in a time sequence.

11. A method in accordance with claim 5, wherein said parts R1 and R2 are previous to said motion-compensated image in a time sequence.

12. (New) A method of determining motion compensation for an input frame, said method comprising the steps of:

providing a first motion vector MV1 between a reference frame and said input frame;

calculating a second motion vector MV2 between a first field of said input frame and a second field of said reference frame, said second motion vector MV2 being parallel to said first motion

vector MV1 and different in magnitude by a factor of a predetermined ratio; and

performing a motion compensation process to said first field of said input frame to form a motion-compensated image for said first field of said input frame, using a first field of said reference frame along with said first motion vector MV1 and further using said second field of said reference frame along with said second motion vector MV2,

wherein said predetermined ratio is determined by a ratio of a set time interval T2 corresponding to the first motion vector MV1 and a set time interval T1 corresponding to the second motion vector MV2.

13. (New) A method of determining motion compensation for an input frame, said method comprising the steps of:

providing a first motion vector MV1 between a reference frame and said input frame;

calculating a second motion vector MV2 between a second field of said input frame and a first field of said reference frame, said second motion vector MV2 being parallel to said first motion vector MV1 and different in magnitude by a factor of a predetermined ratio; and

performing a motion compensation process to said second field of said input frame to form a motion-compensated image for said second field of said input frame, using a second field of said reference frame along with said first motion vector MV1 and further using said first field of said reference frame along with said second motion vector MV2,

wherein said predetermined ratio is determined by a ratio of a set time interval T2 corresponding to the first motion vector MV1 and a set time interval T1 corresponding to the second motion vector MV2.